

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>A3-A02.07P</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/JP 03/16716</b>	International filing date (day/month/year) <b>25/12/2003</b>	(Earliest) Priority Date (day/month/year) <b>25/12/2002</b>
Applicant <b>NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL ...</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- contained in the international application in written form.
- filed together with the International application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  Certain claims were found unsearchable (See Box I).

3.  Unity of invention is lacking (see Box II).

4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

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None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/16716

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Description of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GITAN RAAD S ET AL: "Methylation-specific oligonucleotide microarray: a new potential for high-throughput methylation analysis" GENOME RESEARCH, COLD SPRING HARBOR LABORATORY PRESS, US, vol. 12, no. 1, January 2002 (2002-01), pages 158-164, XP002208051 ISSN: 1088-9051 page 159, right-hand column, line 3 ----- -/-	6-8
Y	-----	1-5

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 November 2004

Date of mailing of the international search report

23/11/2004

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/16716

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GITAN RAAD SHEBIB ET AL: "Methylation-specific oligonucleotide microarray: A new potential for high-throughput methylation analysis" PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH ANNUAL MEETING, vol. 42, March 2001 (2001-03), page 564, XP001183741 & 92ND ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH; NEW ORLEANS, LA, USA; MARCH 24-28, 2001 ISSN: 0197-016X abstract -----	1-5
X	BALOG ROBERT P ET AL: "Parallel assessment of CpG methylation by two-color hybridization with oligonucleotide arrays." ANALYTICAL BIOCHEMISTRY, vol. 309, no. 2, 15 October 2002 (2002-10-15), pages 301-310, XP002304763 ISSN: 0003-2697 abstract; figure 1 -----	6-8
Y	WO 02/18632 A (PIEPENBROCK CHRISTIAN ; BERLIN KURT (DE); EPIGENOMICS AG (DE); GUETIG) 7 March 2002 (2002-03-07) page 17 -----	1-5
X	ADORJÁN P ET AL: "Tumour class prediction and discovery by microarray-based DNA methylation analysis" NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 30, no. 5, 1 March 2002 (2002-03-01), page e21, XP002242367 ISSN: 0305-1048 page E21, right-hand column, last paragraph -----	6-8
P,X	EP 1 312 685 A (NISSHIN SPINNING) 21 May 2003 (2003-05-21) claims 1-7 -----	6-8
P,X	SHI H ET AL: "OLIGONUCLEOTIDE-BASED MICROARRAY FOR DNA METHYLATION ANALYSIS: PRINCIPLES AND APPLICATIONS" JOURNAL OF CELLULAR BIOCHEMISTRY, WILEY-LISS INC, US, vol. 88, no. 1, 1 January 2003 (2003-01-01), pages 138-143, XP001183807 ISSN: 0730-2312 abstract -----	6-8
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 03/16716

Patent document cited in search report		Publication date	Patent family member(s)	Publication date	
WO 0218632	A	07-03-2002	DE 10044543 A1 AU 1218702 A AU 1218802 A AU 4835201 A AU 5038101 A AU 5478801 A AU 5479401 A AU 7566301 A AU 7633001 A AU 7633101 A AU 7637101 A AU 7748701 A AU 7752101 A AU 7842001 A AU 7970701 A AU 8391501 A AU 8391601 A AU 8757501 A AU 8757601 A AU 8960001 A AU 8961701 A CA 2420840 A1 DE 20121960 U1 DE 20121961 U1 DE 20121963 U1 DE 20121964 U1 DE 20121965 U1 DE 20121966 U1 DE 20121967 U1 DE 20121968 U1 DE 20121969 U1 DE 20121970 U1 DE 20121971 U1 DE 20121972 U1 DE 20121973 U1 DE 20121974 U1 DE 20121975 U1 DE 20121977 U1 DE 20121978 U1 DE 20121979 U1 WO 0168911 A2 WO 0168912 A2 WO 0177375 A2 WO 0177164 A2 WO 0177376 A2 WO 0177377 A2 WO 0181622 A2 WO 0192565 A2 WO 0177378 A2 WO 0176451 A2	04-04-2002 13-03-2002 13-03-2002 24-09-2001 24-09-2001 23-10-2001 23-10-2001 23-10-2001 23-10-2001 23-10-2001 14-01-2002 23-10-2001 14-01-2002 07-11-2001 14-01-2002 08-01-2002 14-01-2002 08-01-2002 08-01-2002 11-12-2001 08-01-2002 27-02-2003 15-01-2004 18-12-2003 18-12-2003 15-01-2004 24-12-2003 20-11-2003 18-12-2003 18-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 15-01-2004 24-12-2003 20-09-2001 20-09-2001 18-10-2001 18-10-2001 18-10-2001 18-10-2001 01-11-2001 06-12-2001 18-10-2001 18-10-2001	04-04-2002 13-03-2002 13-03-2002 24-09-2001 24-09-2001 23-10-2001 23-10-2001 23-10-2001 23-10-2001 23-10-2001 14-01-2002 23-10-2001 14-01-2002 07-11-2001 14-01-2002 08-01-2002 14-01-2002 08-01-2002 08-01-2002 11-12-2001 08-01-2002 27-02-2003 15-01-2004 18-12-2003 18-12-2003 15-01-2004 24-12-2003 20-11-2003 18-12-2003 18-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 24-12-2003 15-01-2004 24-12-2003 20-09-2001 20-09-2001 18-10-2001 18-10-2001 18-10-2001 18-10-2001 01-11-2001 06-12-2001 18-10-2001 18-10-2001
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